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ANNUAL REPORT

OF THE

DEPARTMENT OF RAILWAYS

OF THE

PROVINCE OF ALBERTA

1921

PRINTED BY ORDER OF THE LEGISLATIVE ASSEMBLY



EDMONTON:

PRINTED BY J. W. JEFFERY, KING'S PRINTER

1922

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EDMONTON, January 1st, 1922.

To His Honour

ROBERT GEORGE BRETT,

Lieutenant Governor of the Province of Alberta,
Edmonton, Alberta.

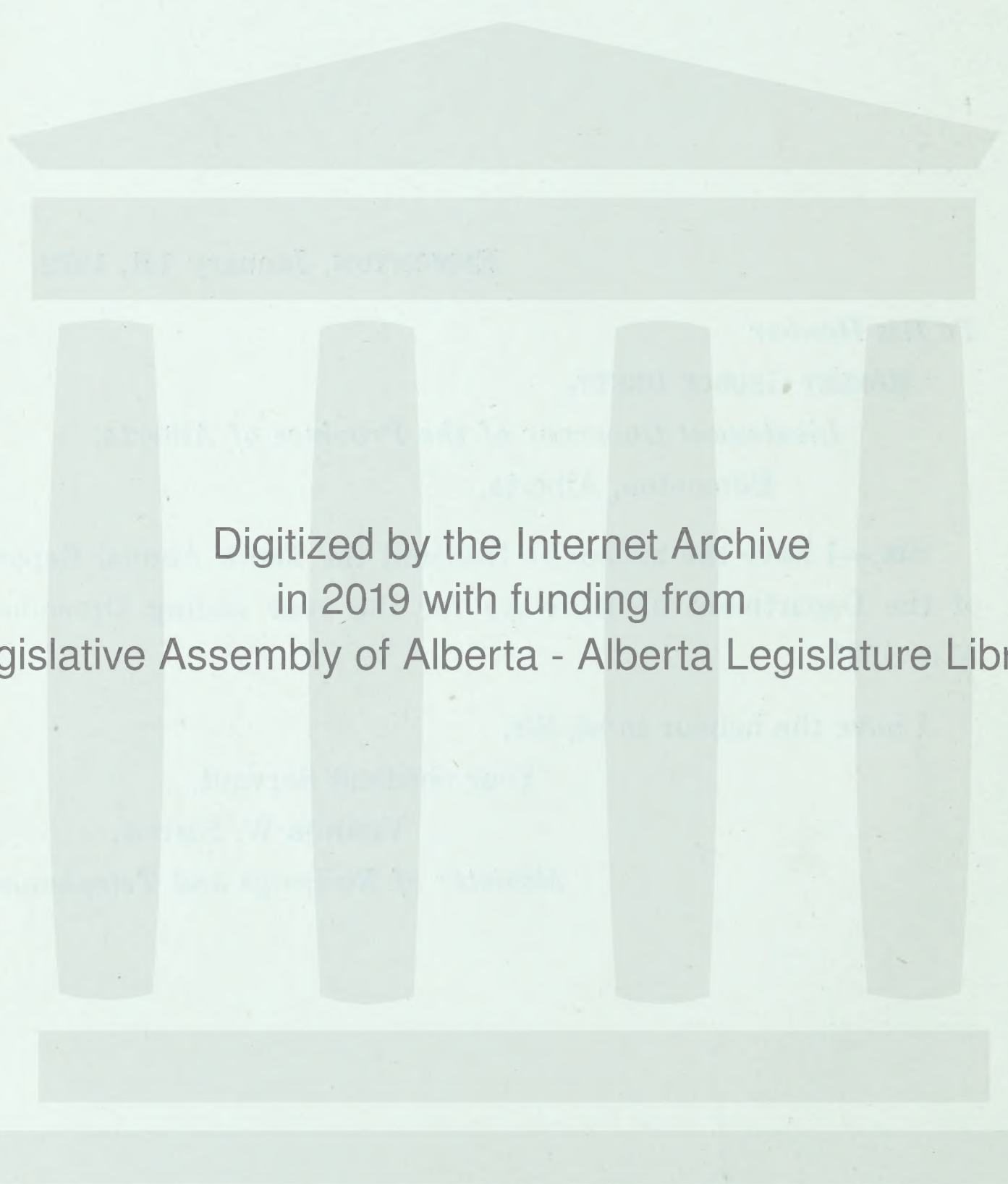
SIR,—I have the honour to transmit the Tenth Annual Report of the Department of Railways for the year ending December 31st, 1921.

I have the honour to be, Sir,

Your obedient Servant,

VERNOR W. SMITH,

Minister of Railways and Telephones.



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REPORT OF THE DEPUTY MINISTER

DEPARTMENT OF RAILWAYS AND TELEPHONES

EDMONTON, ALBERTA,
January 1st, 1922.

THE HONOURABLE VERNOR W. SMITH,
Minister of Railways and Telephones,
Edmonton, Alberta.

SIR,—I have the honour to submit herewith the Annual Report of the Railways Branch of the Department of Railways and Telephones, for the year ending December 31st, 1921.

RAILWAYS.

A comparatively small amount of new mileage was constructed in the Western Provinces during the past year, 304 miles being the total gain for all lines west of Port Arthur. Of this amount 93 miles, or 31%, was the net gain to Alberta.

Although no large amount of new construction was performed in the Province, nevertheless the year was a very active one for those lines which are either owned outright by the Provincial Government or in which it is heavily interested. In continuation of the policy laid down in the previous year when the Province assumed control of the Northern Railways, further large sums were required during 1921 in order that these lines might be carried to completion and placed in a condition that would permit of economical operation. Legislation was accordingly passed at the last session of the Legislative Assembly, authorizing the Government to advance the required amounts to the various Railroads in the Province in the form of loans, as under:

<i>Railway Company</i>	<i>Amts. Authorized by Legislature at Session of 1921</i>	<i>Amts. Advanced by Prov. Gov't. During 1921</i>
Edmonton, Dunvegan & B.C. }	\$1,500,000.00	\$1,475,000.00
Central Canada Railway ... }		
Central Canada Ry. Extension	600,000.00	321,811.16
Alberta & Great Waterways ..	2,100,000.00	2,323,000.00
Lacombe & North-Western ...	150,000.00	215,000.00
Totals	<u>\$4,700,000.00</u>	<u>\$4,334,811.16</u>

The work of reconditioning and overtaking the accumulation of deferred maintenance on all these Railways was vigorously prosecuted during the working season, and in order to give a comprehensive presentation of the work carried out on these lines during the year, it has been considered advisable to deal with each Railway separately in the order in which they appear above.

EDMONTON, DUNVEGAN & BRITISH COLUMBIA RAILWAY.

Of the sum of \$2,500,000.00 which the Government was authorized to advance to the Manager of the E.D. & B.C. Railway and the Central Canada Railway for the purpose of bringing the lines up to a standard of reasonable operating efficiency, \$1,187,751.73 was expended on the E.D. & B.C. Railway during the year 1921. Sufficient progress was made in the improvement of the line so that on November 6th, the schedule time of passenger trains from Edmonton to Grande Prairie was reduced from 39½ hours to 26 hours 50 minutes.

Approximately 263,000 ties were placed in the track during the season, and although a considerable number are yet required before all deferred maintenance may be said to be overtaken, yet it may be stated that the track is now in a reasonably safe condition for the operation of trains at moderate speeds.

The work of ballasting those portions of the line which either had never received a fair lift or else were still being operated as skeleton track, was vigorously prosecuted. Approximately 258,000 cubic yards of ballast were hauled and placed in the track. The entire track has now received a good running lift of ballast with the exception of about 20 miles east of McLennan and about 25 miles of the Grande Prairie Branch, which will require ballast during the coming season.

Very extensive repairs were necessary in connection with trestle bridges, as it was found that the pile foundations were badly decayed and endangering the safety of the superstructure. The piles in a large number of bents were accordingly cut off at the ground, the rotted portion of the pile removed and sills laid in place of the portion taken out. Pile retaining walls were driven at several points along the line where the stability of the road-bed was threatened on account of movement of fills. The trestle bridges at Miles 108.6, 117.9, 300.5 and Mile 10.7 on the Grande Prairie Branch were part-filled during the season.

Wooden culverts to the number of 128, and 51 corrugated iron pipes were installed, these being necessary to provide additional drainage of the road-bed.

Three temporary water supplies were constructed and extensive repairs made to a number of the existing water stations.

New standard portable stations were placed at Chisholm and Girouxville, and various alterations and additions made to existing station buildings. A number of miscellaneous buildings required in connection with the work of ballasting and general operation of the line were constructed. The engine-house at Spirit River was taken down and re-erected at Grande Prairie. Repairs were also made to the engine-houses at Edmonton and McLennan.

The major portion of the work of ditching the road-bed was performed during the season of 1920, but additional ditching was carried out during 1921, fourteen miles of side and off-take ditches being completed. In addition, about 3,800 cubic yards of material were excavated in connection with straightening of channels in the vicinity of bridge openings. Two ditching machines were also

engaged during the summer in cleaning out cut ditches, removing small slides and widening narrow cuts, over 100,000 cubic yards being removed by this method.

Standard grain-loading platforms were erected at Mearns, Pickardville, Fawcett, Girouxville and Sexsmith, while stock-yards were constructed at Alcomdale and Girouxville.

Approximately 53 miles of right-of-way fence were erected, most of this mileage being covered by outstanding orders of the Board of Railway Commissioners.

The work of re-clearing the right-of-way was continued during the early months of the year, and practically the entire line has now been cleared of second-growth brush and trees. New track was laid at various points to facilitate the handling of traffic. A new wye was constructed at Westlock and four private spurs were installed for industrial purposes at various points on the line.

Re-conditioning of the telegraph line was urgently needed, a large number of the poles having rotten butts. These were sawn off and the poles reset. Ten new highway crossings and nine farm crossings were graded and repairs made to several other crossings during the season.

A total of 35.8 miles of the line were fire-guarded; 27.1 miles of this being on the Grande Prairie Branch.

One of the clauses of the agreement made between the Provincial Government and the E.D. & B.C. Railway required the provision of a physical connection between the lines of the E.D. & B.C. and the Canadian Pacific Railways in the City of Edmonton. This connection was rendered feasible by the construction of a piece of line, 1,375 ft. in length, connecting the Canadian National Railway with the existing track of the Canadian Pacific Railway at 116th Street. Trains commenced to operate over this connection on October 6th, thus enabling passengers to arrive at and depart from the Canadian Pacific Depot at 109th Street and Jasper Avenue.

CENTRAL CANADA RAILWAY.

An amount of \$107,584.34 was expended during the past year in connection with re-conditioning of this line, and although additional ties and ballast will be required next season a regular train service has been maintained and satisfactory service provided.

Over 14,000 ties were placed in the track. These were sufficient to place the track in a reasonably safe condition, but a considerable number will yet be required before all replacement requirements are fully met.

Only 5,250 cubic yards of ballast were distributed and placed in the track. This quantity was entirely used in patching work and was obtained from a deposit of first-class gravel which was opened up on the west side of Peace River. All bad spots were lifted and a fair line and surface has been obtained. However, almost the entire line will require to be ballasted next season.

A concrete wall was constructed on the west bank of the Peace River in order to protect the west pedestal of the bridge. This

pedestal is resting on a foundation of soft sandstone which was being rapidly eroded by ice and water action.

A small amount of repair work was done on the trestle bridges; eleven wooden culverts were installed and 3,120 lin. feet of ditching was excavated. Approximately 2,700 cubic yards of material were moved by a mechanical ditcher.

The pipe line of the temporary water supply at Peace River was extended to the bridge and up one of the piers so as to permit engines to take water from a 6-inch stand-pipe while standing on the bridge. Extensive repairs were necessary to the pipe line and pump-house at Mile 30. A log section-house and bunk-house were constructed at Springburn, and the work of clearing the right-of-way of its accumulation of second-growth brush and trees has been completed over the entire line.

The east approach of Peace River bridge was widened by train-filling with material excavated from the adjacent side-hills. Approximately 56,000 cubic yards were used in this work and a roadway of satisfactory width is now available as a traffic way for vehicles desiring to cross the bridge.

Under the authority of an Act passed during the last session of the Legislature, the Government entered into an agreement dated May 25th, 1921, whereby the Manager of the E.D. & B.C. Railway and the Central Canada Railway, undertook to construct 25 miles of line beyond the present end of steel at Peace River, the Government to provide the necessary funds on monthly estimates submitted by the Railway Company, and the amounts to be repayable at the same time, and secured in the same manner by the Railway Company, as the advances made by the Provincial Government under the main agreement dated July 21st, 1920.

A portion of the grade ascending the side of the valley on the west side of Peace River had already been graded by the former management in the year 1917. Considerable deterioration had occurred to portions of this work, and after investigation a revised location was decided upon, which required an increase of gradient, but resulted in a saving of 1.7 mile of distance. Construction was thereupon commenced in the month of June and track was laid to Berwyn, a distance of 23.6 miles, by the conclusion of the year. Amounts totaling \$321,811.16 have been advanced to the Company to date on account of this extension, though work to the value of \$550,109.65 has actually been performed, according to monthly estimates submitted. Further amounts will, of course, be required next season to complete the work of ballasting and to provide the necessary facilities still required.

This extension will unquestionably prove highly beneficial to the farming settlement which it was intended to serve and a large volume of grain will no doubt be hauled over it within the next few months.

ALBERTA AND GREAT WATERWAYS RAILWAY.

The work done on this Railway during 1921 was largely a continuation of that which had been started the previous season. Steps were taken in the winter of 1920 and 1921 to obtain an

adequate supply of ties for renewal purposes during the ensuing season, with the result that a total of approximately 350,000 ties was delivered upon the right-of-way within the year. Of this number 98,000 were obtained from points on the E.D. & B.C. Railway, these latter ties costing the A. & G. W. Railway \$1.03 each on cars at Carbondale Junction. South of Lac La Biche 198,000 ties were used for renewal purposes; about 74,000 were used for renewals north of Lac La Biche; while 50,000 were used in the construction of the new line down Deep Creek and in various new sidings, elevator tracks, etc. The balance of approximately 36,000 is on hand for next season's requirements.

A total of 203,000 cubic yards of ballast were distributed and placed under the track. Of this amount about 30,000 cubic yards were placed in the first division and 173,000 cubic yards in the second division. A large amount of track repair work was carried out simultaneously with ballasting operations and about 175 miles of track were lifted and surfaced during the season.

A new bridge was constructed across the Christina River, consisting of two 60-ft. Howe Truss spans on timber piers, and eleven bents of pile trestle approach. This bridge replaced a 21-bent pile trestle which was partially destroyed every season when the ice broke up in the river. Considerable repairs were carried out on the trestle bridges south of Lac La Biche, a large portion of piles being badly rotted. These were cut off at the ground, the decayed portion removed and the piles replaced on sills.

Three permanent water supplies were installed during the season, these being located at Miles 164, 224, and 256. The water tank at Mile 105 was taken down and re-erected at Mile 86. Considerable repairs and additions were also made to the water supplies at Lac La Biche and at Mile 99. Approximately 130,000 cubic yards of material in side and off-take ditches were moved, this representing about 95 miles of ditching. A mechanical ditching machine was also used for cleaning out cut ditches, removing slides and widening cuts, about 40,000 cubic yards being moved by this method.

Twenty-one section bunk-houses and thirteen section tool-houses were constructed and installed at various points both north and south of Lac La Biche. Temporary station-buildings were erected at Fedorah, Egremont and Thorhild. Standard grain-loading platforms and stockyards were constructed at Fedorah, Egremont, Thorhild, Ellscott and Venice. A total of 40 sets of switch ties were installed in Lac La Biche yards and at all sidings on the first division.

A mechanical coaling plant was erected at Lac La Biche.

Elevator tracks were constructed at Fedorah, Egremont, Thorhild, Ellscott and Lac La Biche. Six highway crossings were constructed at various points on the first division. Forty-eight sets of cattle-guards were built, and a large number of these installed in the track south of Lac La Biche.

In conjunction with the work of ditching and draining the right-of-way, a large quantity of corrugated iron culvert pipe was used. On the first division 1,352 lineal feet of pipe were installed and 2,311 lineal feet were placed north of Lac La Biche.

An additional wire was strung on the telephone line from Lac La Biche to Mile 272, and considerable repairs were made to the pole line both north and south of Lac La Biche.

A large amount of work was done in connection with re-clearing of right-of-way, and the major portion of the line is now cleared of second-growth brush and trees. On the first division 80 miles of right-of-way have been cleared and on the second division 117 miles were cleared.

A decision was arrived at during the previous season to abandon the line which had been graded down the Clearwater Valley and to construct a new line down Deep Creek, the cost of which it was estimated would be less than that of completing the Clearwater Valley line.

A new location of 9.7 miles in length was accordingly surveyed during the winter of 1920 and 1921 and construction was commenced early in the month of May. As the work proceeded, however, it became evident that the cost of this line would be considerably in excess of the original estimate, and from information now available it is apparent that this section of line will have cost approximately \$390,000.00 by the time the work still remaining to be done has been completed.

With the object of obtaining a comparison between the estimated cost of completing the original line down the Clearwater Valley and the cost of the Deep Creek line, Mr. H. G. Dimsdale, who since September had been Resident Engineer in charge of the Deep Creek construction, was asked to make an investigation of the favorable and unfavorable features of both lines, having regard to both operating and construction values. Early in the month of December, accordingly, when the Deep Creek line was practically completed, Mr. Dimsdale made a personal examination of both lines, and his report and estimated cost of completing the Clearwater Valley line and constructing the Deep Creek line are submitted herewith. You will note that the estimated excess cost of the Deep Creek construction over the original line down the Clearwater Valley amounts to \$443,835.15. It may be stated at this point that in the month of August a drastic revision was made to the classification of material which was being allowed the contractor on the Deep Creek construction. Had the original classification been allowed the excess cost of the Deep Creek line would have been increased by approximately \$62,000.00, this representing the amount which was directly saved the Company as a result of the revision of classification.

The intention of the former Government had been to construct the railway to the settlement of Fort McMurray, making this point the terminus of the line and establishing it as the point of transfer for all freight and supplies destined for the northern trading posts. Investigation by the Department led to the conclusion that the point selected for a steam-boat landing at Fort McMurray, to which it was proposed to construct a service spur some 3,000 ft. in length, was altogether unsuited for the purpose. Ice gorges form in the Athabasca River during the spring break-up, and result in a raise of the river level which would inevitably submerge any warehouses or wharves which

would be required at the point selected. A photograph of this proposed location taken at the time of the spring break-up is reproduced below and shows graphically what occurs at this point. In this connection, it should also be noted that the real head of navigation on the Athabaska River at low water is at Stony Island, about ten miles below McMurray, so that there is no specific reason for extending the Railway to Fort McMurray if some nearer point on navigable water is equally available.

Further investigation by the Department led to the conclusion that the expenditure required to complete the Railway from the point where the Clearwater River was first accessible by the Railway (at Mile 282) to the settlement of Fort McMurray would not be justified by the amount of traffic in sight at the present time. The amount required to complete the additional mileage with any degree of permanency, was estimated at approximately \$210,000.

The Railway Company already held title to some 875 acres of land in the vicinity of Mile 282, this having been acquired several years previously by the J. D. McArthur management. This property was well adapted for terminal and townsite purposes, practically all of it consisting of heavily-timbered river flat, situated well above extreme high-water level. A spur, approximately 3,400 ft. in length, was constructed from the main line of the railway to the river front, and the principal steamboat companies engaged in the transportation of freight on the Athabasca and McKenzie waterways, also the Imperial Oil Company, immediately made application to the Company for wharfage sites on the waterfront. A small subdivision has been surveyed for the convenience of those desiring to engage in business at this point, which has been given the name of Waterways. It has been decided to merely lease the lots at the present time in order to eliminate the element of speculation which would undoubtedly be present if the lots were otherwise disposed of.



Showing ice gorge conditions in Athabaska River at Fort McMurray in spring of 1918.

An examination of Schedule "E" attached hereto shows that the amount advanced by the Provincial Government to the A. & G. W. Railway during the year 1921, amounts to \$2,323,000; practically all of which has been expended. The amount authorized at the last Session of the Legislature was \$2,098,000.00 but further sums will yet be required before all the work which it was intended to perform has been carried to completion. The excessive cost of this work is mainly accounted for by the high unit prices which were embodied in the Northern Construction Company's contract. Although this contract was on a cost plus basis, one of the clauses provided that if the various classes of work were performed for less than unit prices half the saving effected would go to the contractor, the Company receiving the benefit of the remaining half. The prices at which the work was sublet, however, were so high that only in the case of one item, the minor item of unloading ties, was the work performed at less than the unit price.

For the purpose of making a comparison of the unit prices embodied in the Northern Construction Company's contract and the prices for other work performed during the same period, a statement has been prepared showing the prices paid by the Central Canada Railway in connection with the extension west of Peace River, together with those paid to the Northern Construction Company for the A. & G. W. Railway work.

COMPARISON OF PRICES PAID BY CENTRAL CANADA
RAILWAY AND ALBERTA & GREAT WATERWAYS
RAILWAY FOR VARIOUS CLASSES OF WORK
PERFORMED UNDER CONTRACT
DURING SEASON OF 1921.

<i>Description of Work</i>	<i>Unit</i>	<i>Price C.C.R.</i>	<i>Price A.&G.W.</i>
Solid Rock	c. yd.	\$ 1.25	\$ 1.75
Loose Rock	c. yd.	.50	.80
Hard Pan	c. yd.	.45	.80
Earth	c. yd.	.24½	.45
Overhaul	c. yd.	.01½	.02½
Piling, delivered	lin. ft.	.31	.25
Piling, driven	lin. ft.	.35	.40
Frame Timber in place	M. FBM	51.50	80.00
Ties65	.80

It will be noted that the Central Canada Railway unit prices are considerably below the Northern Construction Company's prices, even though the former work was performed under more onerous conditions than the latter, due to the C.C.R. contractor having to pay all transportation charges from Edmonton to the location of the work, while the Northern Construction Company were allowed free transportation for outfit, men and supplies.

The sum of \$198,046.58 was expended for new equipment during the year, this equipment comprising the following items: 2 locomotives; 4 cabooses; 3 passenger coaches; a buffet and sleep-

ing car; 1 "American" ditching machine; 1 Jordon spreader; 1 snowplow; 2 Western air dump cars; 20 National ballast cars.

These ballast cars were purchased at a cost of \$2,848.94 each delivered in Edmonton. They are in a state of deterioration which precludes their economical repair and would not sell for more than four or five hundred dollars each.

LACOMBE AND NORTH-WESTERN RAILWAY.

The efforts of the Department were chiefly directed to the work of ballasting those portions of the line which had been left over from the previous season, and to lifting and surfacing the remainder of the track. Approximately 30,000 cubic yards of ballast were distributed and placed in the track, and about five miles of line on which ballast had been distributed the previous season were lifted and surfaced. Practically the entire line from Lacombe to Mile 37 has now been ballasted.

About 2,500 ties were used for renewals and for replacing broken ties.

A permanent water station was installed on the north side of Blindman River (Mile 37) and a 14-bent pile trestle was constructed and the track extended across the same in order to obtain access to the water tank.

A standard grain-loading platform was erected at Aspen Beach, and four standard bunk-houses for the accomodation of employees were also constructed.

Additional equipment consisting of a caboose and two flat cars was secured during the season, these being obtained at second-hand prices.

The operating account for the year 1921 shows an apparent deficit of \$23,039.13. This deficit is largely due to the amount expended during the year in dealing with the problems of deferred maintenance such as tie renewals, lifting and surfacing, and general track repairs. The cost of this work being an operating expense resulted in an accumulation of several years of deferred maintenance appearing in the operating account of last year.

I append hereto Mr. Dimsdale's report and estimate of cost to complete the Clearwater Valley line and of constructing Deep Creek line (Alberta and Great Waterways Railway), and the following schedules:

Schedule "A"—Statement of Railway Mileage of Alberta, 1905-1921.

Schedule "B"—Statement of Railway Mileages of the Western Provinces, 1920-1921.

Schedule "C"—Statement of Guaranteed Railway Securities authorized by the Provincial Legislature.

Schedule "D"—Statement of Guaranteed Railway Securities, authorized by the Legislature and executed by the Provincial Government.

Schedule "E"—Statement of Expenditures made by the Alberta and Great Waterways Railway Company from monies loaned to it by the Province of Alberta from January 1st, 1921, to December 31st, 1921.

Schedule "F"—Statement of Expenditures made by the Lacombe and North-Western Railway Company from monies loaned to it by the Province of Alberta from January 1st, 1921, to December 31st, 1921.

I have the honour to be, Sir,

Your obedient servant,

JNO. CALLAGHAN,

Deputy Minister.

ESTIMATE OF COST OF REVISING AND COMPLETING
ORIGINAL A. & G. W. RAILWAY FROM MILE 274 TO
MILE 284 (WATERWAYS), ON 1 PER CENT.
GRADE IN CLEARWATER VALLEY.

ORIGINAL LOCATION.

The original line of the A. & G. W. Railway from the table-land above the Christina River to the flats of the Clearwater River was constructed on a 1 per cent. supported grade, compensated for curvature.

The elevation of the table-land above the Christina River is approximately 1290 feet sea level datum.

The elevation of the Clearwater River flats is approximately 820 feet, or 470 feet lower than the Christina table-land.

The supported 1 per cent. grade commences at Mile 274.1, and ends at Mile 283.6.

There are therefore 9.5 miles of 1 per cent. compensated grade.

The original location shows a balanced profile for this 9.5 miles, of which 7.6 miles is on side hill, with comparatively long tangents and light curves. At two points only is the curvature heavy—Mile 275.6 and Mile 276.7.

EMBANKMENT SLIDES.

From Mile 275.4 to Mile 283 the line was constructed along a side hill which in places is steep. Although an extensive system of surface ditches was necessary and drainage required exceptional care, surface ditches were omitted to a great extent during construction. Many of the embankments developed "slides", due largely to lack of drainage. An attempt was made to evade constructing a permanent roadbed around these slides by building temporary pile bridges across them. This overcame the difficulty where slides had ceased, but where the pilings were driven into embankments or ground which continued to slide, the temporary bridges were wrecked or their surface and alignment destroyed.

EXCAVATIONS.

The original roadbed in excavations was not disturbed by slides. The excavation slopes, being unprotected by surface ditches, washed down into the cut ditches, and in places obstructed the roadbed. It was possible to overcome these obstructions by widening the roadbed in cuts and providing a bench between the cut ditch and the base of the slope. Also extensive surface ditches at a distance up hill from the cut slopes were required.

FORMATION.

The Clearwater River flows through an old valley without a sign of recent slides along the west bank, where the A. & G. W. Railway was constructed.

A dense forest of poplar and spruce, more than one hundred years old, covers the slope; indicating that no slides have occurred during that period. The A. & G. W. Railway excavations would be classified as hardpan with a small percentage of boulders and float rock, and overlaid with a shallow surface soil. Three outcroppings of tar sands occur; these tar sands form a desirable, firm roadbed.

NECESSARY ALIGNMENT REVISIONS.

The originally constructed location requires to be revised at the following points, throwing the line into the hillside to avoid sliding embankments and to obtain a firm roadbed:

From Mile 275.2 to Mile 275.8
From Mile 277.5 to Mile 278.6
From Mile 280.6 to Mile 282.2

This makes a total of 3.3 miles to be revised out of the total of 9.5 miles of 1 per cent. grade.

GRADES.

The diversions would slightly lengthen the line except from Mile 275.2 to Mile 275.8 and the 1 per cent. maximum grade compensated for curvature, would not be exceeded.

ALIGNMENT REVISIONS.

Alignment revisions would avoid embankments wherever the nature of the ground indicated a tendency to slide, and as far as the dictates of economy in construction would permit. A firm roadbed was obtained in excavations on the line constructed, and it may be assumed that a firm roadbed may be constructed where the revisions are proposed.

ESTIMATE OF COST OF REVISING AND COMPLETING
CONSTRUCTION OF THE ORIGINAL A. & G. W. RLY.
LINE FROM MILE 274 TO MILE 284
(WATERWAYS).

ENGINEERING—LOCATION.

Revising 3.3 Miles.

Location Engineer, ½ month at	\$250.00	\$ 125.00
Resident Engineer, ½ month at	175.00	87.50
Instrument man, ½ month at	125.00	62.50
Rodman, ½ month at	90.00	45.00
H. Chainman, ½ month at	90.00	45.00
R. Chainman, ½ month at	70.00	35.00
2 Axemen, ½ month at	70.00	70.00
Cook, ½ month at	90.00	45.00
Provisions, ½ month		120.00
Camp, ½ month		15.00
Total		\$ 650.00

ENGINEERING—CONSTRUCTION.

Resident Engineer, 6 months at	\$175.00	\$1050.00
Instrument man, 6 months at	125.00	750.00
Rodman, 6 months at	90.00	540.00
Axeman, 6 months at	70.00	420.00
Cook, 6 months at	90.00	540.00
Provisions, 6 months		900.00
Camp, 6 months		120.00
Total		\$4320.00

CLEARING.

3.3 miles estimated:	
20 acres at \$60.00	\$1200.00
6.2 miles estimated:	
12 acres at \$60.00	\$ 720.00
Grubbing estimated:	
16 acres at \$150.00	\$2400.00

GRADING.

Completing 6.7 Miles—Re-Constructing 3.3 Miles.

Mile 275	2,000	cubic yards
Mile 276	30,000	" "
Mile 277	7,000	" "
Mile 278	20,000	" "
Mile 279	12,000	" "
Mile 280	25,000	" "
Mile 281	30,000	" "
Mile 282	12,000	" "
Mile 283	8,000	" "
Mile 284	4,000	" "
Total	150,000	cubic yards
At 80c		\$120,000.00

BRIDGING AND CULVERTS.

Estimated for 3.3 Miles.

20,000 lin. feet logs at 7c	\$1,400.00
3,000 lbs. iron at 10c	300.00
	<hr/>
	\$1,700.00
11 bent Pile Trestle across Deep Creek	1.800.00
	<hr/>
	\$3,500.00

LIFTING AND RE-LAYING TRACKS.

3.3 miles at \$1,000.00	\$3,300.00
Tracklaying M. 283.7 to M. 284.5—0.8 miles at \$1,000.00	800.00
	<hr/>
	\$4,100.00

TELEGRAPH LINE.

7 miles at \$350.00 per mile	\$2,450.00
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SUMMARY OF COST.

Engineering Location	\$ 650.00
Engineering Construction	4,320.00
Clearing	1,920.00
Grubbing	2,400.00
Grading	120,000.00
Bridging and Culverts	3,500.00
Track-laying	4,100.00
Telegraph Line	2,450.00
Ballast, M. 272 to M. 284.5, 37,500 cu. yds. at 70c per yd.	26,250.00
Lifting and Surfacing Track, 12.5 Miles at \$600.00 per mile	7,500.00
Ties from M. 283.7 to M. 284.5, 2,300 ties at 93½c....	2,150.50
Estimated depreciation on ties now in track based on a cost of replacing at 40c per tie.....	6,912.00
Superintendence and General	6,263.50
	<hr/>
Total	\$188,416.00

COST OF DEEP CREEK LINE.

Deep Creek Valley.

Deep Creek Valley is a sliding clay formation. There are no bottom lands along the Creek; the banks rising from the waters edge. The Creek continues to undermine the banks and a succession of slides result. Broken saplings protrude from the Cut Banks and the small growth of trees indicates the unstable character of the valley.

The source of Deep Creek is in the swamps and muskegs of the Christina table-land at an elevation of approximately 1,300 feet sea level datum and it empties into the Clearwater at 800 feet elevation, falling this 500 feet within a distance of 9 miles. Deep Creek in summer averages 20 feet wide and 1 foot deep.

A. & G. W. RAILWAY LOCATION. DEEP CREEK.

The Deep Creek location of the A. & G. W. Railway commences at Mile 272, and is 10 miles in length to the junction with the originally constructed line in the Clearwater Valley. The upper 3 miles are approximately level. The next 4 miles drop 200 feet and the lower 3 miles drop 300 feet. The maximum grade is 2 per cent. for the lower 3 miles.

Having decided on a maximum grade of 2 per cent. for Deep Creek line, the customary engineering practice would have maintained the 2 per cent. grade until the line was out of Deep Creek Valley, thus reducing the amount of expensive sidehill construction by substituting 2 miles of 2 per cent. grade for the 4 miles of 1 per cent. grade that have been built. The location crosses Deep Creek nine times on pile or frame trestle bridges. The two largest of these bridges, namely, bridges No. 2 and No. 3 would have been eliminated by continuing the 2 per cent. grade as outlined above. At Bridge No. 2 the line crosses Deep Creek from the south to the north bank, and at Bridge No. 3 it re-crosses the Creek from the north to the south bank. The present location on the 1 per cent. grade was not justified in making these two expensive crossings. A more economical location lay on the south side of the Creek, between these two bridges, and the cost of both might have been saved.

ALIGNMENT.

The construction of the line down Deep Creek required a number of alignment revisions, as the work progressed, owing to constant slides in both embankments and excavations. The revisions as finally concluded result in a succession of sharp curves.

GRADES.

The 10 miles of Deep Creek location, show the upper 3 miles of practically level grade followed by 4 miles of 1 per cent., while the remaining lower 3 miles is 2 per cent. grade.

DEEP CREEK CONSTRUCTION.

The construction of the line down Deep Creek was largely a matter of handling slides. Embankments were underlaid with pole drains covered with brush. An extensive system of surface ditches was made, and additional ditches were dug near the upper slopes of embankments. In places a false berm was also constructed between these latter ditches and the embankment slopes. In spite of all this precaution and expense, some embankments continued to slide until freeze up. The cuts were excavated to a wide road-bed with large ditches, and a bench between the ditches and the cut slopes. Surface ditches at a distance from the upper slope of the cut failed to take care of all the surface water. The unstable nature of the material in the valley allows water to percolate to a great depth. The slopes of many cuts slid in, breaking back as far as 100 feet from the excavation. The bottoms of some cuts heaved up. These slides and upheavals continued until freeze up.

The surface ditches are difficult to maintain, some ditches scour and cave in; others fill with sediment or slides from their slopes. Many ditches were destroyed by valley slides.

The channel of Deep Creek is diverted along a considerable portion of the lower 3 miles of line. Many timber revetments were built and back filled with brush, earth and rock. Ice accumulates in such swift northern streams, filling the channel and overflowing the banks. The embankment slopes are protected to a reasonable extent, but future spring floods may require additional expenditures.

OPERATION OF DEEP CREEK LINE.

The 3 miles of 2 per cent. grade necessitates "doubling" from Waterways up to Lynton siding. This great expense will be increased later on, when developments in the north demand a more frequent train service. It will then be necessary to maintain a pusher engine and crew to overcome the 2 per cent. grade. Deep Creek line cannot be considered complete. The spring of 1922 may prove the line uneconomical to maintain.

COMPARATIVE COST OF DEEP CREEK LINE AND COMPLETING CONSTRUCTION ON THE CLEARWATER VALLEY LINE.

Deep Creek Line.

Cost of new line down Deep Creek to date (as per attached statement) . .	\$347,496.24	
Estimated cost to complete Deep Creek line (as per attached statement) . . .	42,670.00	
		<hr/>
		\$390,166.24
Capital expenditure equivalent to maintaining a pusher engine		333,000.00
		<hr/>
Total		\$723,166.24

Clearwater Valley Line.

Estimated cost to complete Clearwater Valley Line	\$188,416.00	
Excess distance over Deep Creek Line 2.69 miles, \$32,667 per mile	87,874.23	
Excess curvature over Deep Creek Line, 118 degrees of curvature at \$25.77 per deg.	3,040.86	
		<hr/>
Total		\$279,331.09
		<hr/>
Excess Cost of Deep Creek Line Over Clearwater Valley Line		\$443,835.15
		<hr/>

(Sgd.) H. G. DIMSDALE,

December 23rd, 1921.

ALBERTA AND GREAT WATERWAYS RAILWAY.

*Estimated Cost of Constructing New Line Down Deep Creek from
Mile 272.1 to Mile 281.8 (to Dec. 31st, 1921).*

Main Line 9.7 Miles
Siding . . . 0.3 Miles

Total . . 10.00 Miles

1. ENGINEERING—

Reconnaissance and Stadia Survey (R. W. Jones)	\$ 1,225.35	
Preliminary and Location Surveys (Approx.)	4,570.00	
Construction Engineering	8,280.00	
		\$ 14,075.35

2. RIGHT-OF-WAY—

Cost of Right-of-way Survey	1,237.00
---------------------------------------	----------

3. GRADING—

Clearing 140.70 ac. at \$60.00	\$ 8,442.00	
Grubbing 45.24 ac. at \$150.00	6,786.00	
Earth Excav., 34,925 cu. yds. at 45c	15,716.25	
Loose Rock, 8,248 cu. yds. at 80c	6,598.40	
Solid Rock, 34,394 cu. yds. at \$1.75	60,189.50	
Hardpan, 131,238 cu. yds. at 80c	104,990.40	
Overhaul, 71,032 cu. yds. at 2½c	1,775.80	
Supplementary Estimates (plus 10%)	3,425.39	
Force Account (plus 10%)	4,027.42	
Crib-work (plus 10%) (Approx.)	2,300.00	
		214,251.16

4. BRIDGES, TRESTLES AND CULVERTS—

Piling Delivered, 19,820 lin. ft.: 26.6 l.f. Inc. 10%	\$ 5,272.12	
Piling Driven, 16,440 lin.ft. at 40c	6,576.00	
Frame Timber, 252,200 F.B.M. (Approx.) (Net \$9,460)	15,000.00	
Iron, Screw Bolts, 4,780 lbs. at 12c	573.60	
Iron, All other, 7,490 lbs. at 10c	749.00	
Lifting Bridge material from old line, 153,000 F.B.M.	2,500.00	
		30,670.72
89 lin. ft. C. G. I. Pipe 15 in. dia. at \$1.92 ft.	\$ 170.88	
1,390 lin. ft. C. G. I. Pipe 18 in. dia. at \$2.39 ft.	3,322.10	
342 lin. ft. C. G. I. Pipe 24 in. dia. at \$3.93 ft.	1,344.06	
66 lin. ft. C. G. I. Pipe 30 in. dia. at \$4.87 ft.	321.42	
121 lin. ft. C. G. I. Pipe 36 in. dia. at \$7.67 ft.	928.07	

129 lin. ft. C. G. I. Pipe 48 in. dia. at \$10.44 ft.	\$ 1,346.76	
	<hr/>	
	7,433.29	
Plus 10%	743.33	
Hauling and placing Culverts	4,079.67	
	<hr/>	\$ 12,256.29
5. TIES—		
27,744 New Ties at 93½c per tie.....	\$ 25,940.64	
1,056 Old Ties at 15c per tie	158.40	
Two sets Switch Ties for No. 10 Turn- outs, 8,774 F.B.M. at \$43.00 per M..	377.28	
	<hr/>	26,476.32
6. RAILS—		
Lifting rails from old line 943 G. Tons ..		11,400.00
7. FROGS AND SWITCHES—		
Two complete No. 10 Turnouts, \$225 ea.		450.00
8. TRACK FASTENINGS—		
Lifting Track Fastenings from old line, 53.4 tons	\$ 590.00	
Track Spikes, 26.2 tons at \$155 per ton	4,061.00	
	<hr/>	4,651.00
9. TRACKLAYING AND SURFACING—		
Tracklaying 10 miles at \$990 per mile. \$	9,900.00	
Surfacing, Brushing and Double Spiking Curves	2,026.00	
Installing two Turnouts at \$27.50 each	55.00	
	<hr/>	11,981.00
10. TELEPHONE LINE—		
10 miles Telephone Line at \$350.00 per mile (Approx.)		3,500.00
		<hr/>
		\$330,948.84
11. SUPERINTENDENCE—		
5% of above items		16,547.40
		<hr/>
		\$347,496.24

Office of Chief Engineer,

Edmonton, Alberta.

Dec. 24th, 1921.

ALBERTA AND GREAT WATERWAYS RAILWAY.

*Approximate Estimate of Cost to Complete Deep Creek Revision.
Mile 272.1 to Mile 281.8.*

Main Line 9.7 Miles

Siding ... 0.3 Miles

Total ..10.00 Miles

1. Engineering	\$ 600.00
2. Ballasting—30,000 cu. yds. Ballast at 70c per yd.	21,000.00
Lifting and Surfacing Track—10 Miles at \$600.00 per mile	6,000.00
3. Bridges, Trestles and Culverts—Placing two extra stringers and making permanent deck on all trestles	4,500.00
4. Grading—Removing slides and widening Cuts..	8,000.00
5. Miscellaneous—Outstanding Gov't dues on Piling cut during 1921	595.00
6. Superintendence and General—5% of items 2 to 4 inclusive	1,975.00
	<hr/>
	\$ 42,670.00

Office of Chief Engineer,

Edmonton, Alberta.

Dec. 30th, 1921.

SCHEDULE "A"

STATEMENT OF RAILWAY MILEAGE OF ALBERTA.

1905-1921

			<i>Total Mileage</i>
1905	Canadian Pacific Railway	1060	1060
1906	Canadian Pacific Railway	1061	
	Canadian Northern Railway	178	1239
1907	Canadian Pacific Railway	1106	
	Canadian Northern Railway	220	1326
1908	Canadian Pacific Railway	1106	
	Canadian Northern Railway	220	
	Grand Trunk Pacific Railway ...	40	1366
1909	Canadian Pacific Railway	1156	
	Canadian Northern Railway	220	
	Grand Trunk Pacific Railway ..	129	1505
1910	Canadian Pacific Railway	1269	
	Canadian Northern Railway	220	
	Grand Trunk Pacific Railway ..	293	1782
1911	Canadian Pacific Railway	1387	
	Canadian Northern Railway	329	
	Grand Trunk Pacific Railway ..	384	2100

SCHEDULE "A"—(Continued)

			<i>Total Mileage</i>
1912	Canadian Pacific Railway	1480	
	Canadian Northern Railway	912	
	Grand Trunk Pacific Railway ..	638	
	Edmonton, Dunvegan & B. C. Rly.	25	3055
1913	Canadian Pacific Railway	1638	
	Canadian Northern Railway	1171	
	Grand Trunk Pacific Railway ..	707	
	Edmonton, Dunvegan & B. C. Rly.	131	3647
1914	Canadian Pacific Railway	1887	
	Canadian Northern Railway	1188	
	Grand Trunk Pacific Railway ..	707	
	Edmonton, Dunvegan & B. C. Rly.	240	
	Alberta & Great Waterways Rly.	75	4097
1915	Canadian Pacific Railway	1909	
	Canadian Northern Railway	1247	
	Grand Trunk Pacific Railway ..	707	
	Edmonton, Dunvegan & B. C. Rly.	337	
	Alberta & Great Waterways Rly.	175	
	Central Canada Railway	48	4423
1916	Canadian Pacific Railway	1920	
	Canadian Northern Railway	1250	
	Grand Trunk Pacific Railway ..	707	
	Edmonton, Dunvegan & B. C. Rly.	408	
	Alberta & Great Waterways Rly.	223	
	Central Canada Railway	49	4557
1917	Canadian Pacific Railway	1920	
	Canadian Northern Railway	1193	
	Grand Trunk Pacific Railway ..	643	
	Edmonton, Dunvegan & B. C. Rly.	408	
	Alberta & Great Waterways Rly.	272	
	Central Canada Railway	49	
	Lacombe & Blindman Valley E. Rly.	20	4505
1918	Canadian Pacific Railway	1920	
	Canadian Northern Railway	1195	
	Grand Trunk Pacific Railway ..	640	
	Edmonton, Dunvegan & B. C. Rly.	408	
	Alberta & Great Waterways Rly.	287	
	Central Canada Railway	49	
	Lacombe & Blindman Valley E. Rly.	20	4519
1919	Canadian Pacific Railway	1920	
	Canadian National Railways	1306	
	Grand Trunk Pacific Railway ..	640	
	Edmonton, Dunvegan & B. C. Rly.	408	
	Alberta & Great Waterways Rly.	294	
	Central Canada Railway	49	
	Lacombe & North-Western Rly...	33	4650
1920	Canadian Pacific Railway	1921	
	Canadian National Railways	1361	
	Grand Trunk Pacific Railway ..	640	
	Edmonton, Dunvegan & B. C. Rly.	408	

SCHEDULE "A"—(Continued)

			Total Mileage
	Alberta & Great Waterways Rly.	284	
	Central Canada Railway	49	
	Lacombe & North-Western Rly...	33	4696
1921	Canadian Pacific Railway	1974	
	Canadian National Railways	1373	
	Grand Trunk Pacific Railway ..	643	
	Edmonton, Dunvegan & B. C. Rly.	408	
	Alberta & Great Waterways Rly.	282	
	Central Canada Railway	72	
	Lacombe & North-Western Rly..	37	4789

SCHEDULE "B"

STATEMENT OF RAILWAY MILEAGES OF THE WESTERN PROVINCES, 1920-1921.

ONTARIO

West of Port Arthur

	December 31st 1920	December 31st 1921
Canadian Pacific Railway	333	333
Canadian National Railways	843	843
National Transcontinental Railway)	—	—
	1176	1176

MANITOBA

Canadian Pacific Railway	1726	1733
Canadian National Railways.....)	2425	2442
Hudson's Bay Railway		
National Transcontinental Railway)		
Grand Trunk Pacific Railway	210	210
Great Northern Railway	238	238
	4599	4623

SASKATCHEWAN

Canadian Pacific Railway	2779	2828
Canadian National Railways	2385	2454
Grand Trunk Pacific Railway	1167	1167
	6331	6449

ALBERTA

Canadian Pacific Railway	1921	1974
Canadian National Railways	1361	1373
Grand Trunk Pacific Railway	640	643
Edmonton, Dunvegan & B. C. Rly..	408	408
Alberta & Great Waterways Rly...	284	282
Central Canada Railway	49	72
Lacombe & North-Western Rly.	33	37
	4696	4789

SCHEDULE "B"—(*Continued*)

BRITISH COLUMBIA

	December 31st 1920	December 31st 1921
Canadian Pacific Railway	1322	1319
Canadian National Railways	597	607
Grand Trunk Pacific Railway	679	679
Great Northern Railway	436	424
Pacific & Great Eastern Rly.	321	395
Kettle Valley Railway	324	324
	<hr/> 3679	<hr/> 3748
	<hr/> 20481	<hr/> 20785

SCHEDULE "C"

STATEMENT OF GUARANTEED RAILWAY SECURITIES
AUTHORIZED BY THE PROVINCIAL
LEGISLATURE.

CANADIAN NORTHERN RAILWAY

<i>Line of Railway</i>	<i>Guarantee per mile</i>	<i>Mileage Guaranteed</i>
From Strathcona via Camrose and Calgary to Lethbridge	\$15,000	355
From Camrose to Vegreville	15,000	50
From crossing of second above line and Little Bow, south via Macleod to Inter- national Boundary	15,000	110
From near Macleod to western boundary.	15,000	65
From near Cardston to western boundary.	15,000	35
From Calgary via Cochrane to the east side of Rocky Mountain Park	15,000	50
From near Morinville easterly	15,000	40
From Morinville to Athabasca Landing...	15,000	72.3
From Mile 175 of the Goose Lake to Munson	15,000	127.5

CANADIAN NORTHERN WESTERN RAILWAY

From Athabasca Landing to Fort Mc- Murray	\$15,000	175
From first above line east to Lac La Biche	15,000	40
From Athabasca Landing north of Lesser Slave Lake to Peace River Crossing..	15,000	100
From Onoway northwest to Pine River Pass	20,000	250
From Oliver northeast to St. Paul des Metis	18,000	100
From Bruderheim via Vermilion, Wain- wright and Medicine Hat to Inter- national Boundary with a branch north- west of Vermilion to eastern boundary	13,000	200
From Calgary northwest to Brazeau Line	13,000	100
From Camrose to Alsask	13,000	80

SCHEDULE "C"—(Continued)

<i>Line of Railway</i>	<i>Guarantee per mile</i>	<i>Mileage Guaranteed</i>
From Strathcona southwest via Cochrane to Pincher Creek	\$15,000	100
From Blackfalds to Goose Lake Line	13,000	118.5
From Blackfalds west to Brazeau River..	25,000	114.07

GRAND TRUNK PACIFIC LINES COMPANY

From Tofield to Calgary	\$15,000	201.5
From Bickerdike southwesterly	20,000	58

EDMONTON, DUNVEGAN & BRITISH COLUMBIA RAILWAY

From Edmonton, northwest via Dunvegan to western boundary	\$20,000	411
From Spirit River to Grande Prairie	20,000	60

ALBERTA AND GREAT WATERWAYS RAILWAY.

From Edmonton to Fort McMurray (in- cluding sidings)	\$ 20,000	350
Terminals	400,000	

CENTRAL CANADA RAILWAY

From Edmonton, Dunvegan & British Col- umbia Railway, north	\$20,000	114
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LACOMBE & BLINDMAN VALLEY E. RAILWAY

From Lacombe west	\$ 7,000	39.10
Total		3,515.97

SCHEDULE "D"

STATEMENT OF GUARANTEED RAILWAY SECURITIES
AUTHORIZED BY THE LEGISLATURE AND EXECUTED
BY THE PROVINCIAL GOVERNMENT.

CANADIAN NORTHERN RAILWAY

<i>Line of Railway</i>	<i>Guarantee per mile</i>	<i>Mileage Executed</i>	<i>Mileage Completed</i>
From Strathcona via Camrose to Calgary	\$15,000	230	230
From Camrose to Vegreville...	15,000	45	46.44
From Morinville to Athabasca Landing	15,000	72.3	72.3
From Mile 175 of the Goose Lake Line to Munson	15,000	127.5	127.5
From north of Calgary to Leth- bridge	13,000	125	29

SCHEDULE "D"—(Continued)

<i>Line of Railway</i>	<i>Guarantee per mile</i>	<i>Mileage Executed</i>	<i>Mileage Completed</i>
From crossing above line and Little Bow River, south via Macleod to International boundary	\$13,000	110	
From near Macleod to the western boundary	13,000	65	
CANADIAN NORTHERN WESTERN RAILWAY			
From Blackfalds to Brazeau River	\$25,000	114.07	114.07
From Onoway northwest to Pine River Pass	20,000	100	41.30
From Oliver northeast to St. Paul des Metis	18,000	100	99.95
From Bruderheim via Vermilion, Wainwright and Medicine Hat to the International Boundary with a branch northwest of Vermilion to eastern boundary	13,000	30	30
From Calgary northeast to Brazeau line	13,000	100	
From Camrose to Alsask	13,000	80	59.7
From Strathcona via Cochrane to Pincher Creek	15,000	20	1.29
From Blackfalds to Goose Lake Line	13,000	118.5	60.6
GRAND TRUNK PACIFIC BRANCH LINES COMPANY			
From Tofield to Calgary	\$15,000	201.5	201.5
From Bickerdike southwesterly	20,000	58	58
EDMONTON, DUNVEGAN & BRITISH COLUMBIA RAILWAY			
From Edmonton northwest via Dunvegan to western boundary	\$20,000	411	358
From Spirit River to Grande Prairie	20,000	60	50
ALBERTA AND GREAT WATERWAYS RAILWAY			
From Edmonton to Fort McMurray	\$20,000	350	303
Note: Including Sidings.			
Terminals	400,000		
CENTRAL CANADA RAILWAY			
From McLennan to Peace River and west	\$20,000	100	49
LACOMBE & BLINDMAN VALLEY E. RAILWAY			
From Lacombe west	\$ 7,000	39.1	33.30
Total		2656.97	

SCHEDULE "E"

STATEMENT OF EXPENDITURES MADE BY THE ALBERTA
AND GREAT WATERWAYS RAILWAY COMPANY FROM
MONIES LOANED TO IT BY THE PROVINCE OF
ALBERTA FROM JANUARY 1st TO
DECEMBER 31st, 1921.

1.	Engineering	\$ 57,501.54
2.	Right-of-way and Station Grounds	5,623.98
3.	Ditching, Clearing and Grading	396,642.16
4.	Bridges, Trestles and Culverts—Howe Truss Bridges \$31,901.80; Trestle Bridges \$55,596.17 Culverts \$49,977.87	137,475.84
5.	Ties—Track Ties for new construction \$38,356.90; Switch Ties \$8,196.23	46,553.13
6.	Frogs and Switches	3,795.27
7.	Ballast	333,338.01
8.	Tracklaying and Surfacing	297,578.54
9.	Roadway Tools	16,044.03
10.	Fencing	6,359.04
11.	Crossings and Signs	2,193.40
12.	Telephone Lines	17,042.27
13.	Station Buildings and Fixtures	4,988.22
14.	General Offices at Edmonton	2,727.83
15.	Shops and Engine Houses	157.78
16.	Shop Machinery and Tools	9,073.00
17.	Water Stations	42,762.28
18.	Lac La Biche Coaling Plant	15,400.07
19.	Lac La Biche Warehouse	249.45
20.	Miscellaneous Structures	47,970.32
21.	Transportation of Men and Material	2,860.32
22.	Rent of Equipment	431.86
23.	Operating Deficit North of Lac La Biche	201,283.54
24.	New Equipment Purchased	198,046.58
25.	Legal and General Expenses	31,245.64
26.	Lac La Biche Hotel—Repairs to Heating and Water System	2,166.32
27.	Re-conditioning Work South of Lac La Biche	311,167.85
28.	Stock on Hand	58,494.70
29.	Balance on Hand	73,827.03

Total Amount Loaned by Province to Railway
Company During 1921\$2,323,000.00

SCHEDULE "F"

STATEMENT OF EXPENDITURES MADE BY THE LACOMBE
AND NORTH-WESTERN RAILWAY COMPANY FROM
MONIES LOANED TO IT BY THE PROVINCE OF
ALBERTA FROM JANUARY 1st TO DECEMBER
31st, 1921

1.	Engineering	\$ 11,315.53
2.	Right-of-way	10,682.90
3.	Grading	6.00
4.	Bridges, Trestles and Culverts—Blindman River Trestle \$4,696.41; Culverts \$566.70	5,263.11
5.	Ties	3,071.63
6.	Rails	4,116.12
7.	Track Fastenings and Other Material	255.56
8.	Ballast	25,513.43
9.	Tracklaying and Surfacing	23,513.52
10.	Roadway Tools	1,007.32
11.	Fencing	684.62
12.	Crossings and Signs	736.00
13.	Telephone Line	81.77
14.	General Office Buildings	4.50
15.	Shop and Engine House, Rimbey	776.62
16.	Shop Machinery and Tools	1,764.08
17.	Water Stations	10,094.94
18.	Miscellaneous Structures	3,986.17
19.	Transportation of Men and Material	7.98
20.	Earnings and Operating Expenses—Deficit ...	23,039.13
21.	Equipment	2,742.08
22.	Legal and General Expenses	4,676.91
23.	Repayment to A. & G. W. Rly. on Account of Advance Made in 1920	25,000.00
24.	Stores and Material on Hand	35,748.27
25.	Balance on Hand	20,911.81
Total		<u>\$ 215,000.00</u>

